

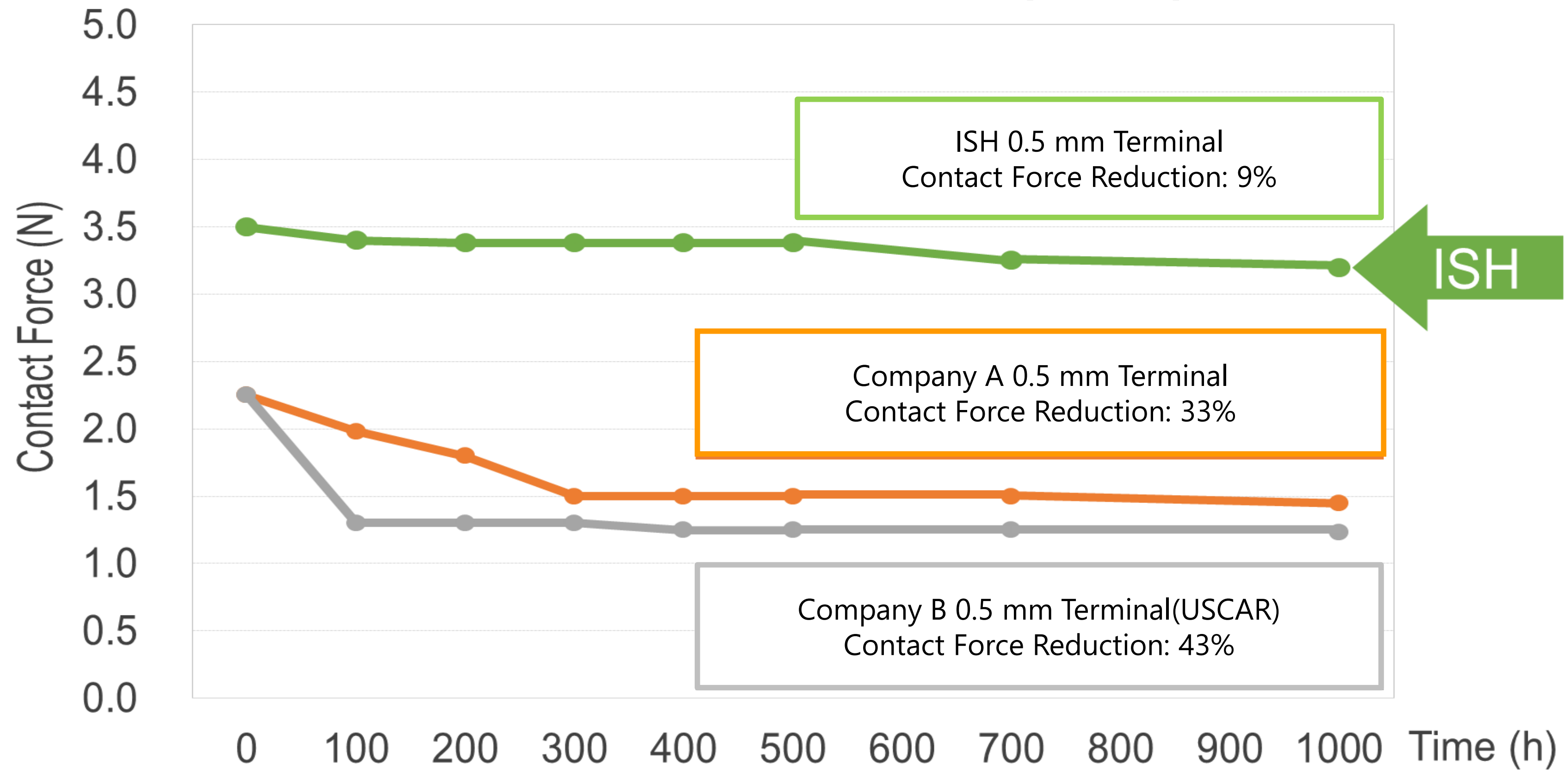
# High-Power Wire-to-Board Connectors (ISH/ISHV/IARPB)

Click the photos below to get more detailed product information. (except ISHV Horizontal & Vertical type)

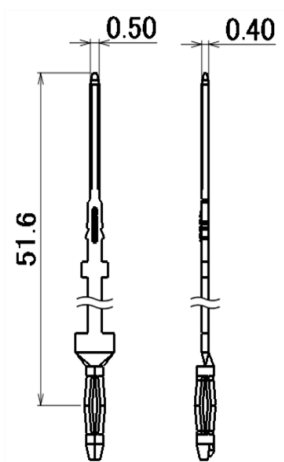
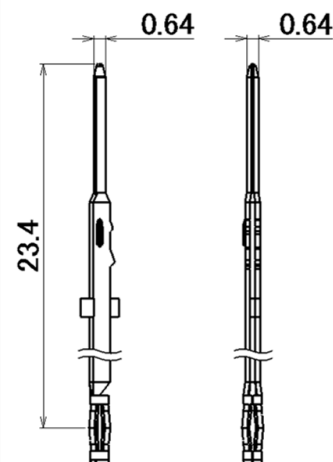
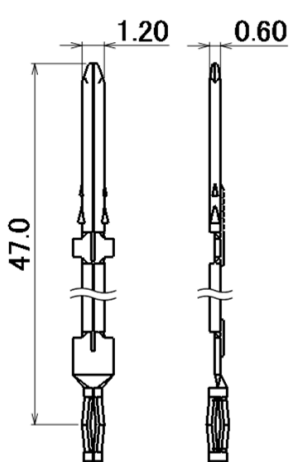
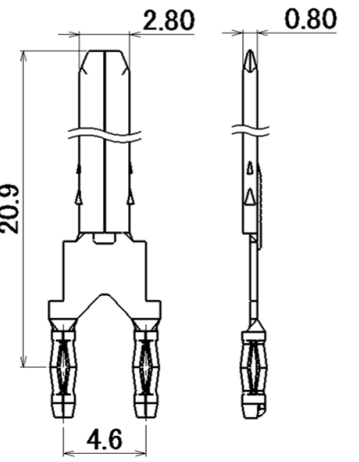
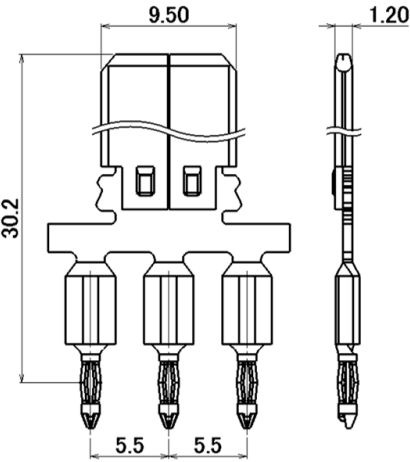
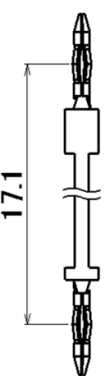
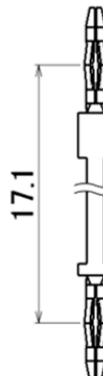
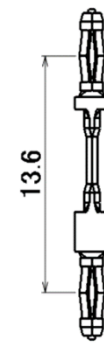
| Series                  | ISH   |   |   |   | ISHV  |   |   | IARPB   |
|-------------------------|---|---|---|---|---|---|---|---|
| Mating Type             | Horizontal  |   | Vertical  | Wire to Wire  | Horizontal  |   | Vertical  | Through-Hole DIP  |
| Feature                 |  |  <b>P</b> Power pin |  |  |  |  |  |  |
|                         | <b>Miniaturized 125°C resistance horizontal mating connector</b>                  | <b>Dedicated Power Pin</b>  | <b>Miniaturized 125°C resistance vertical mating connector</b>                      | <b>Miniaturized 125°C resistance wire-to-wire connector</b>                         | <b>Miniaturized 125°C resistance LV214 compatible connector</b>                     | <b>CPA option (Connector Position Assurance)</b>                                    | <b>Miniaturized 125°C resistance LV214 compatible connector</b>                     | <b>Miniaturized board-in connector</b>  |
| Available Pin Count     | 3 (1 row)<br>6/8/12/16/20 (2 rows)  | 20<br>(2 rows/Signal 18+Power 2)  | 10/20/26 (2 rows)   | 3 (1 row)   | 12/16 (2 rows)  | 8 (2 rows)  | 8 (2 rows)  | 2/3/4/5 (1 row)   |
| Pitch                   | 2.0 mm  | Signal : 2.0 mm<br>Power : 3.8 mm   | 2.0 mm  |   |   |   |   | 2.5 mm  |
| Pin Size                | 0.50 mm * 0.40 mm (020)   | Signal :<br>0.50 mm * 0.40 mm (020)<br>Power :<br>1.50 mm * 0.64 mm (060)                             | 0.50 mm * 0.40 mm (020)   |   |   |   |   | Φ 0.7   |
| Compliant Specification | Several OEM specs   | Several OEM specs   | LV214   | Several OEM specs   | LV214   | LV214   | LV214   | Several OEM specs   |
| Mating Height           | 7.4 mm (1 row)<br>10.9 mm (2 rows)  | 13.60 mm  | 20.75 mm  | 8.00 mm   | 10.90 mm (2 rows)   | 11.40 mm (2 rows)   | 19.95 mm  | 3,30 mm   |
| Current Rating          | 4.5A  | Signal 4.5A Power 10A   | 4.5A  |   |   |   |   | 3A  |
| Operating Temperature   | -40 - 125°C   |   |   |   |   |   |   | -40 - 125°C   |
| Vibration Resistance    |   |   |   |   |   |   |   | 10G   |
| Plating                 |   |   |   |   |   |   |   | Sn  |

# High-Power Wire-to-Board Connectors (ISH/ISHV)

## Stress Relaxation (125°C)



# High-Power Supply Terminals for Custom Connectors

| Series                    | ISFIT   |  |   |   |   |   |   |   |
|---------------------------|---|--|---|---|---|---|---|---|
| Type                      | Wire to Board   |  |   |   |   | Board to Board  |   |   |
| Feature                   |                      |  |  |  |  |  |  |  |
|                           | Wire to Board type press fit terminal   |  |   |   |   | Board to Board type press fit terminal  |   |   |
| Terminal Size(mm)         | 0.50<br>(Thickness : 0.40)  | 0.64<br>(Thickness : 0.25)   | 1.20<br>(Thickness : 0.30)  | 2.80<br>(Thickness : 0.30)  | 9.50<br>(Thickness : 0.64)  | -<br>(Thickness : 0.30)   |   |   |
| Through-hole Diameter(mm) | $\Phi 1.20 \pm 0.05$  | $\Phi 1.20 \pm 0.05$   | $\Phi 1.20 \pm 0.05$  | $\Phi 1.60 \pm 0.05$  | $\Phi 1.50 \pm 0.05$  | $\Phi 1.00 \pm 0.05$  | $\Phi 1.20 \pm 0.05$  | $\Phi 1.60 \pm 0.05$  |
| PCB Material              | FR-4 (1.6mm) $T_g \geq 140^\circ\text{C}$ , Cu plating min. 25 $\mu\text{m}$ required on through-hole |  |   |   |   |   |   |   |
| Insertion Force *1        | 40N / hole  |  |   |   |   |   |   |   |
| Retention Force *1        | 5N / hole   |  |   |   |   |   |   |   |
| Current Rating *2         | 4.5A  | 7.0A   | 14A   | 25A   | 30A   | 4.5A  | 4.5A  | 7.0A  |
| Vibration *2              | 20G   |  |   |   |   |   |   |   |
| Operating Temperature     | -40 - 125 $^\circ\text{C}$  |  |   |   |   |   |   |   |

\*1 Specifications will vary depending on through-hole diameter

\*2 Results from Board-to-Board prototype. Specifications will vary depending on testing conditions.

# Appendix : I-PEX Connectors Series



Click icon below to see latest product information



**MHF<sup>®</sup>**



High-Frequency  
Micro **RF**  
Connectors



**CABLINE<sup>®</sup>**  
**FPL<sup>®</sup>**



High-Speed  
**Micro-Coaxial**  
Connectors



**NOVASTACK<sup>®</sup>**



High-Density  
**Board-to-Board**  
Connectors



**EVAFLEX<sup>®</sup>**  
**MINIFLEX<sup>®</sup>**



High-Density  
**FFC/FPC**  
Connectors



**ISH<sup>®</sup>**  
**IARPB<sup>®</sup>**



High-Power  
**Wire-to-Board**  
Connectors



**CUSTOM**





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